## Review of Previous Cost Estimates

There have been a large number of studies attempting to measure the cost of mental health benefits and the effects of mental health parity legislation. Making comparisons between these studies is sometimes difficult because of differences in how mental health parity is defined, the prevalence of mental illness in the population being studied, the degree of managed care being used, as well as the actuarial assumptions used for the cost and utilization of mental health services (Workshop on Estimating the Costs of Parity, 2001). Because of this, even valid, well-controlled studies may not be comparable to each other or applicable to other groups. This is further complicated by the difficulties associated with evaluating mental health parity (Otten, 1998). However, all of these studies share a common theme, specifically, that all health insurance benefits (including mental health services) have an economic cost (Hay Group, 1999; Jensen & Morrisey, 1999; GAO, 2003). The question is who pays and how much they pay.

Most of these studies involve cost estimates that are lower than the national expenditure data cited previously. This is likely to due to the changes in managed care since those estimates were created as well as differences in methodology. For example, recent trends suggest that the cost of mental health services as a percentage of total health care costs has declined over the last few years (see Hay Group, 1999).

Review of national cost estimates. During the legislative debate prior to the passage of the federal Mental Health Parity Act, cost estimates for full parity legislation ranged from 2.5 percent to approximately 8-11 percent (Hennessey & Goldman, 2001; Otten, 1998; Sing, Hill, Smolkin, & Heiser, 1998; Frank, Koyanagi, & McGuire, 1997). Concerns about the cost of full parity contributed to the development of the Domenici-Wellstone amendment, a more limited form of mental health parity, which became the federal Mental Health Parity Act of 1996. According to Congressional Budget Office estimates, the version of parity actually implemented cost about 0.4 percent (Otten, 1998; Sing, Hill, Smolkin, Heiser, 1998).

After the federal Mental Health Parity Act was passed, interest in the cost of full mental health parity continued and advances in statistical and actuarial models lead to a new set of revised cost estimates for full mental health parity. Most of these studies were based on the Hay/Higgins Group Mental Health Benefit Value Comparison (MHBVC) Model. The MHBVC was developed by the Hay Group for the National Institute of Mental Health (NIHM) to provide estimates of the costs of mental health parity. This model is based on a "common cost" method rather than actual costs (National Institutes of Mental Health, 2000).

Estimates based on this model range from 4.0 percent to 1.4 percent, including the original 1996 Congressional Budget Office (CBO) estimate of a 4.0 percent increase (prior to the passage of the federal Mental Health Parity Act), the 1998 Substance Abuse and Mental Health Services Administration (SAMHSA) estimate of 3.6 percent, and the 1998 estimates by the National Advisory Mental Health Council (NAMHC) of less than 1.0 to 4.0 percent. The NAMHC estimate was later revised to 1.4 percent. Each of these studies use similar actuarial methods, but are based on different assumptions about utilization and how much managed care will reduce costs (National Institutes of Mental Health, 2000).

Although the Hay's Group model is based on commonly accepted actuarial methods, it has been criticized by some economists for using actuarial assumptions that were based on utilization patterns from the 1970's and 1980's. According to Roland Sturm (Sturm, 2001), these models may not reflect the current mental health treatment systems in the private sector, including the recent increase in the use of managed care. This view is supported by a number of recent studies suggesting that the use of managed care may be one of the most significant factors in how much mental health parity may actually cost (e.g., Goldman, McCulloch, & Sturm, 1998; Sing, Hill, Smolkin, & Heiser, 1998; Sturm, Goldman, & McCulloch, 1998; Sturm, 1997). There is also evidence that mental health parity and managed care are self-reinforcing, that is, as parity legislation has increased so has managed care and vice versa (Gitterman, Sturm, & Scheffler, 2001).

Review of state cost estimates. As shown in Table 1, most states currently have some type of mental health parity statute in force. Some states have produced cost estimates of mental health parity for commercial health insurers. Given the wide variation of what "parity" means among state statutes, cost estimates of state mental health parity laws are not always directly comparable. However, among the cost estimates reviewed here, most fall within the 1 to 4 percent range found in national cost estimates.

Consider the following examples. In Oregon, an independent review of health insurance mandates estimated that gross claim costs for mental health services under a limited mental health parity statute was approximately 3.2 percent (Hand & Choate, 1991). In Wisconsin, a study conducted by the Wisconsin Insurance Commissioner of five major health insurance mandates found that gross claim costs for mental health services under a limited mental health parity statute averaged about 3.2 percent for commercial health plans and 3.1 percent for self-funded plans administered by commercial health insurers (Office of the Commissioner of Insurance, 2002).

In Vermont, the cost of implementing full mental health parity was estimated to be less than 1 percent and gross claim costs for mental health services after parity accounted for approximately 2.5 percent of all health claims (Rosenbach, Lake, Young, Conroy, Quinn, Ingels, Cox, Peterson, & Crozier, 2003). In Virginia, an evaluation of all health insurance mandates estimated that the gross claims costs for mental health services under two limited mental health parity statutes was 3.96 percent (Commonwealth of Virginia, 2003).

Maine implemented full mental health parity in 1996. Based on estimates of gross claim costs for mental health services, costs increased less than 1 percent and gross claim costs remained less than 4.5 percent during 1997 and 1998 (Bachman, 2000).

An actuarial study conducted by Milliman & Robertson for the state of Texas, estimated the cost of various health insurance mandates. In this study, the cost of providing a mandated benefit for serious mental illness was estimated to be 2.0 percent of premium (Albee, Blount, Lee, Litow, & Sturm, 2000). Other reviews of mental health parity at the state level, including Maryland, Rhode Island, and Minnesota have concluded that implementing parity increased costs about 1.0 percent or less (Bachman, 2000).

Although a comprehensive review of all of the state cost estimates for mental health parity is beyond the scope of this report, these studies suggest that many states with mental health parity statutes report gross claim costs of 4.0 percent or less and the cost of implementing parity at the state level is consistent with national cost estimates. Yet, many of these state estimates are limited in how they can be directly compared to Utah's mental health parity

legislation. This is because most states with mental health parity have more comprehensive parity statues than Utah (see Table 1) and many of the most important cost factors can vary considerably among states. Furthermore, because much of the available research has focused on full mental health parity, reviews of states with more limited parity laws similar to Utah are less common and less publicized.

However, among the few studies available is Bachman's actuarial study of various parity options in Utah (Bachman, 1996). Prior to the passage of Utah's mental health parity statute, Bachman provided an actuarial model of mental health parity in Utah under four parity options: partial parity, parity for serious mental illness (SMI), full parity, and comprehensive parity. Utah's current mental health parity statute would fall somewhere between partial parity and parity for serious mental illness (SMI). As shown in Table 12, partial parity was estimated to increase costs by approximately 0.7 percent, whereas parity for serious mental illness was estimated to increase costs by approximately 1.9 percent (see Table 12). The Utah Insurance Department's cost estimate of 2.2 percent gross claims costs and a 0.9 percent cost increase appears to be consistent with Bachman's analysis as well as other state and national cost estimates.

Table 12. Summary of Bachman's Actuary Model Results

Percentage Increase in Base Medical Plan for Change to Type of Parity				
	Partial	SMI	Full	Comprehensive
	0.7%	1.9%	2.4%	2.8%
Composite PMPM	\$0.78	\$2.13	\$2.69	\$3.14

Data Source: Adapted from Bachman (1996).

## **Estimated Benefits**

Documenting and presenting the research literature on the benefits of mental health treatment is a complicated undertaking. Mental illness is not a single disease or even a single set of diseases. Thus, providing a complete overview of the relative effectiveness of mental health treatment would take more space than is practical in this report and is really beyond the scope of this evaluation. However, the Surgeon General has published a comprehensive overview of mental health in the United States and includes a review of the effectiveness of many mental health treatments (see U.S. Health and Human Services, 1999). The Surgeon General report concludes that, in general, appropriate mental health treatment reduces health care costs, improves productivity and quality of life, and is generally effective in reducing the symptoms of mental illness. However, like treatments for physical health conditions, these benefits typically come when quality care is received (i.e., the correct diagnosis is made combined with appropriate treatment). Other federal reviews also support this conclusion (National Institutes of Mental Health, 2000; New Freedom Commission on Mental Health, 2004). Although the available data did not permit the Utah Insurance Department to evaluate these factors directly, the available information suggests at least three trends that may be beneficial to commercially insured residents with mental illness.

Increase in mental health coverage. The data suggests that few employers reduced or eliminated coverage and some increased coverage. The percentage of commercially insured members with health insurance coverage for the treatment of mental illness increased from 80 percent in 1999 to 93 percent in 2002. This benefit primarily affects about 13 percent of the group comprehensive health insurance market. There may also have been a general increase in the average minimum level of coverage for commercially insured residents with a group health insurance policy, which affects approximately 29 percent of Utah residents.

Shift from inpatient to outpatient services. The number of inpatient days declined by 50 percent, while outpatient services increased by more than 80 percent. The decline in inpatient services may lead to cost savings in some cases as inpatient services generally cost more than outpatient services. This benefit primarily affects those who use mental health services under a commercial group health insurance policy, which is approximately 1.0 to 1.7 percent of Utah residents.

Financial benefits. Commercial health insurers paid a greater percentage of the costs of mental health services in 2002 than in 1999. For example, health insurers paid approximately 70 percent of the cost of mental health services in 1999. By 2002, health insurers were paying about 76 percent of the costs, a 6 percent increase. This increase could be considered to be near full parity levels, given the fact that during 2002 health insurers were paying 82 percent of total claim costs for all types of health services. While this increase likely provides a financial benefit to consumers, it also means that health insurers also experienced an increase in the underlying costs of health insurance. This benefit primarily affects those who use mental health services under a group comprehensive health insurance policy, which is approximately 1.0 to 1.7 percent of Utah residents.